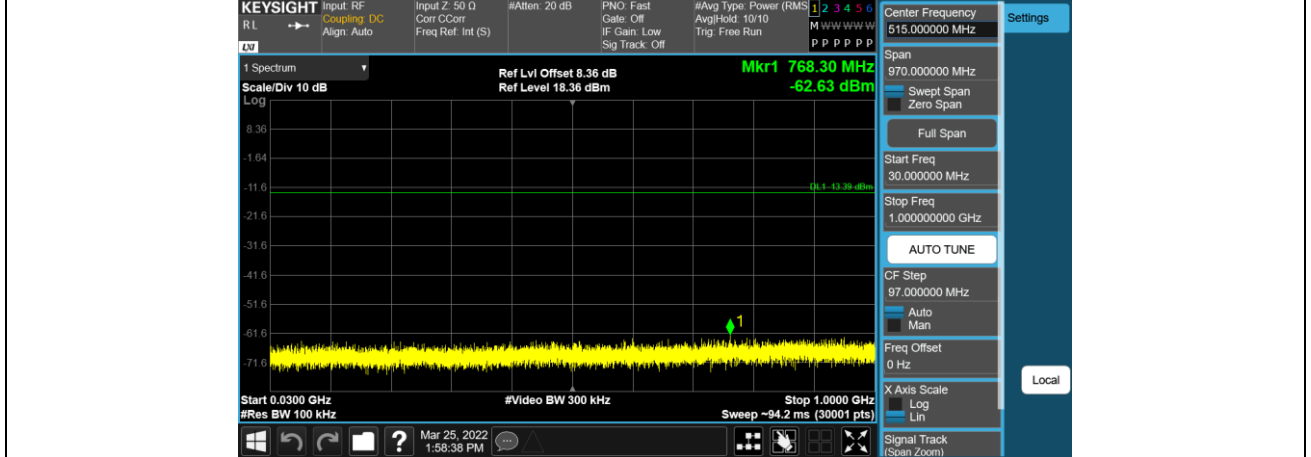


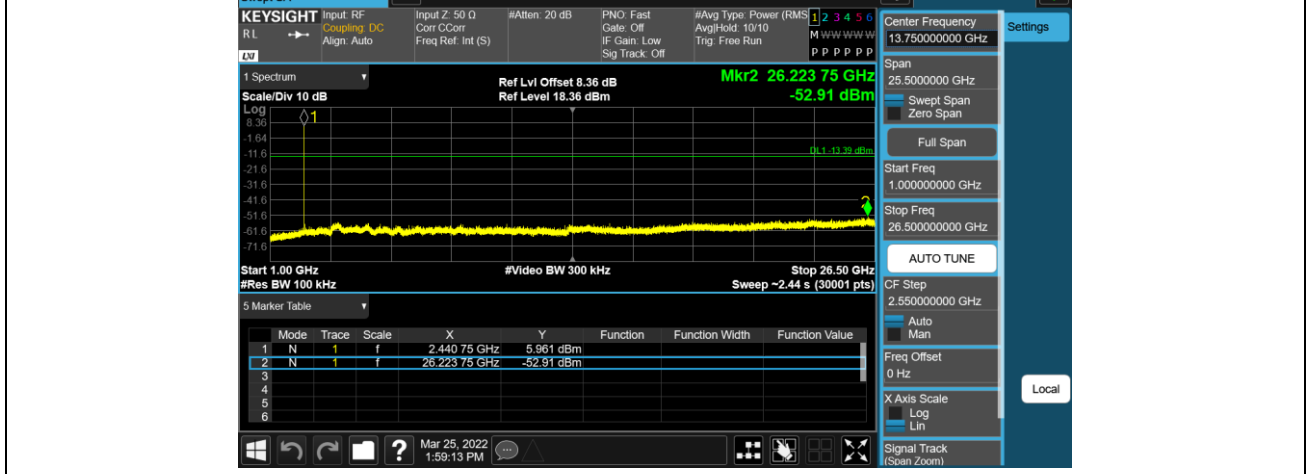
DH5\_2441\_0~Reference

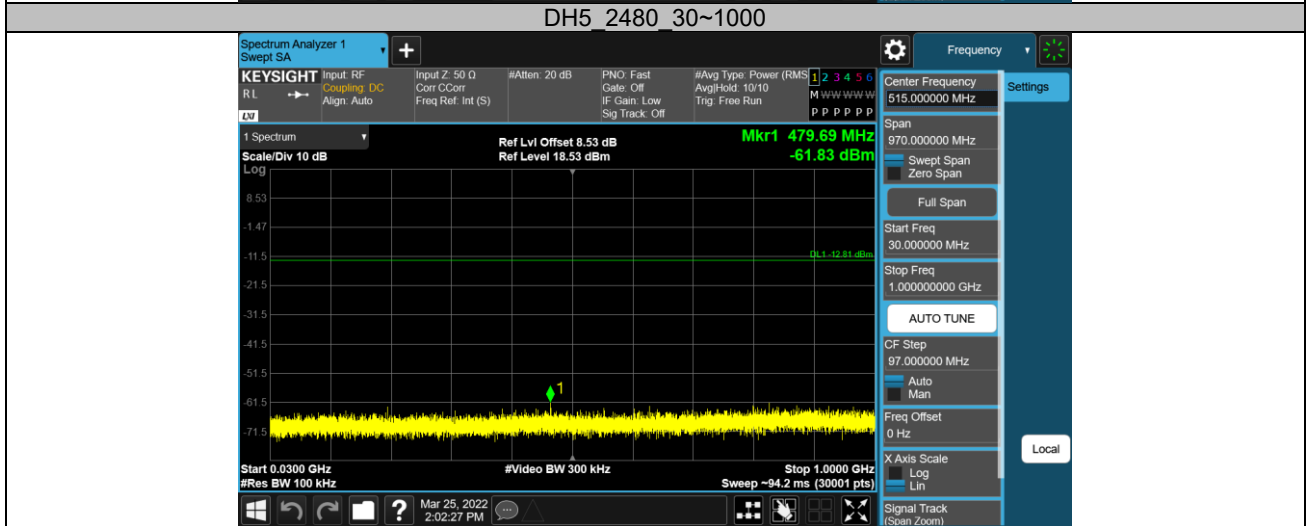
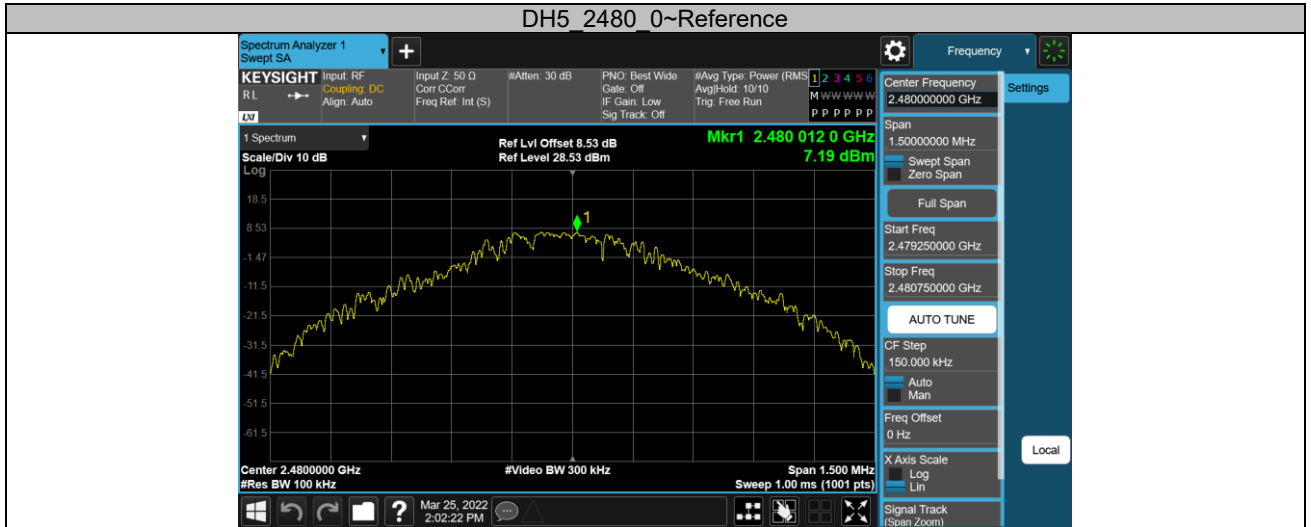


DH5\_2441\_30~1000

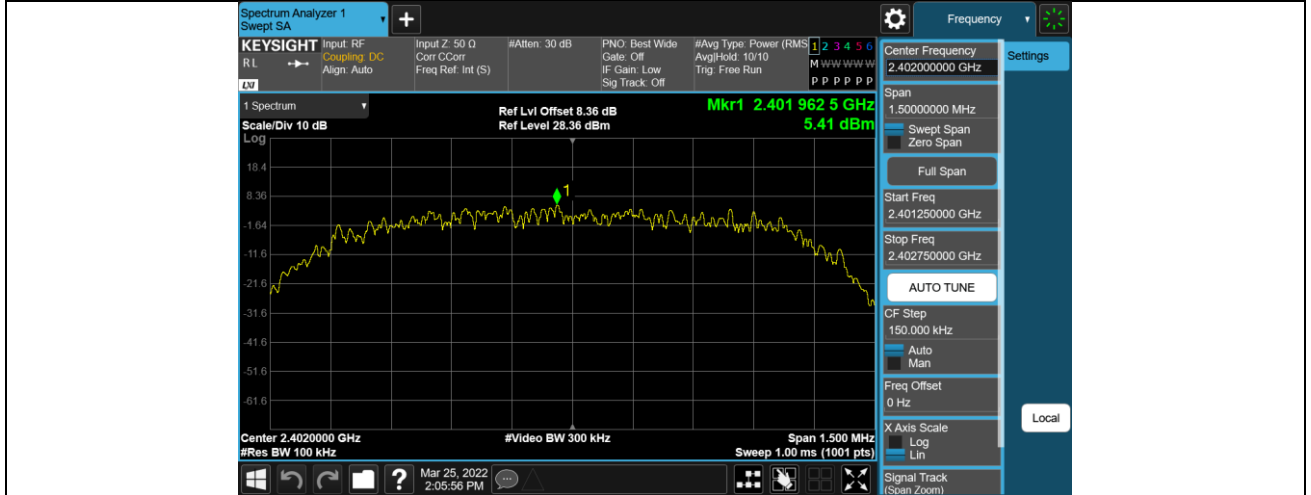


DH5\_2441\_1000~26500

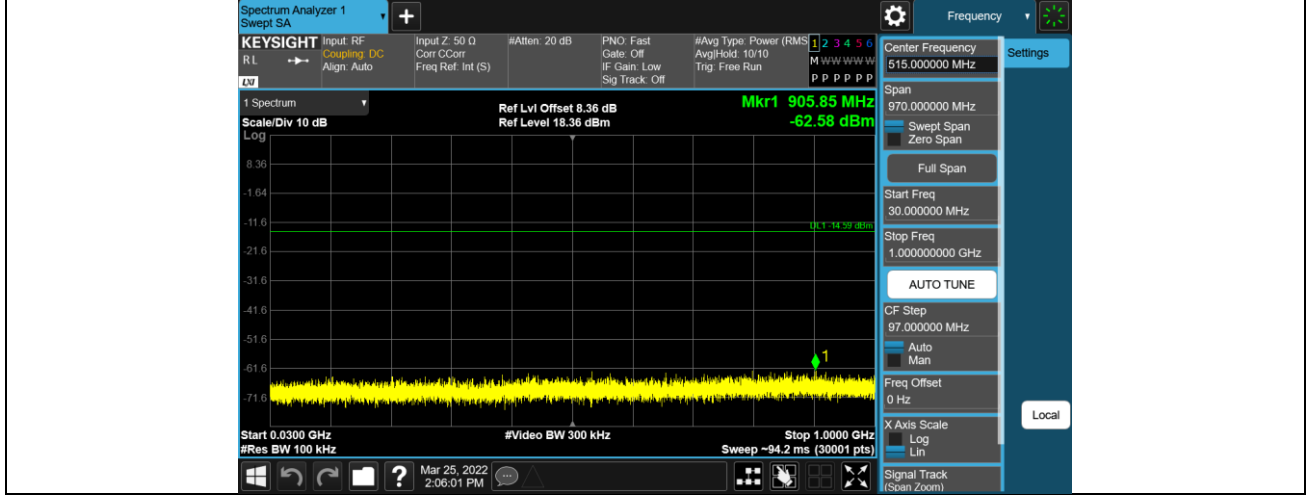




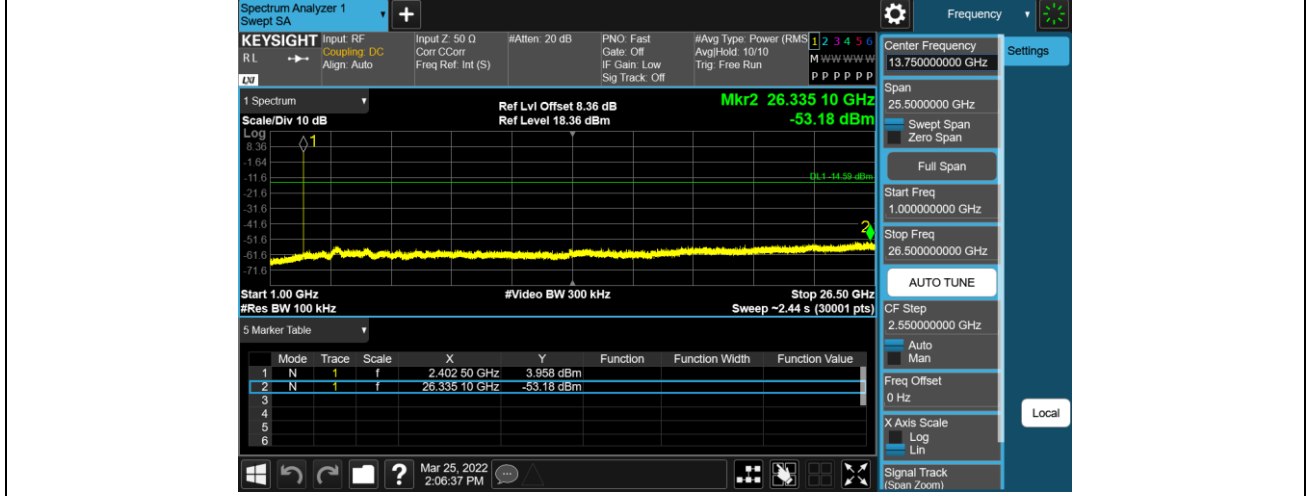
3DH5 2402 0~Reference



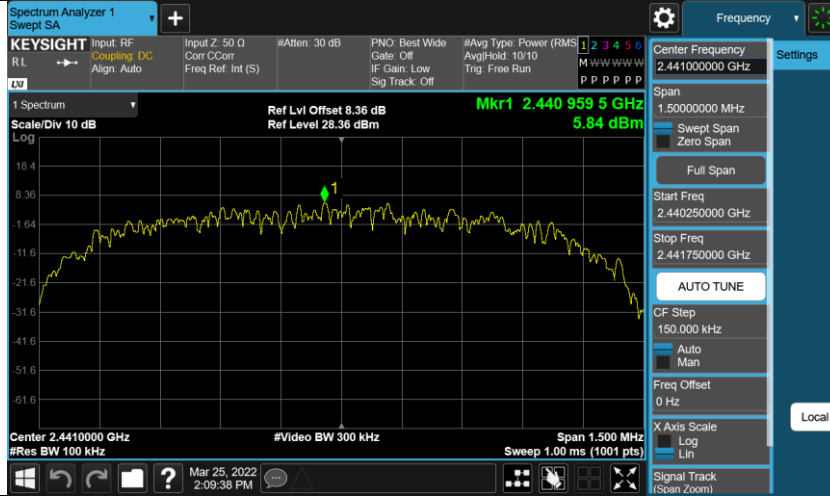
3DH5 2402 30~1000



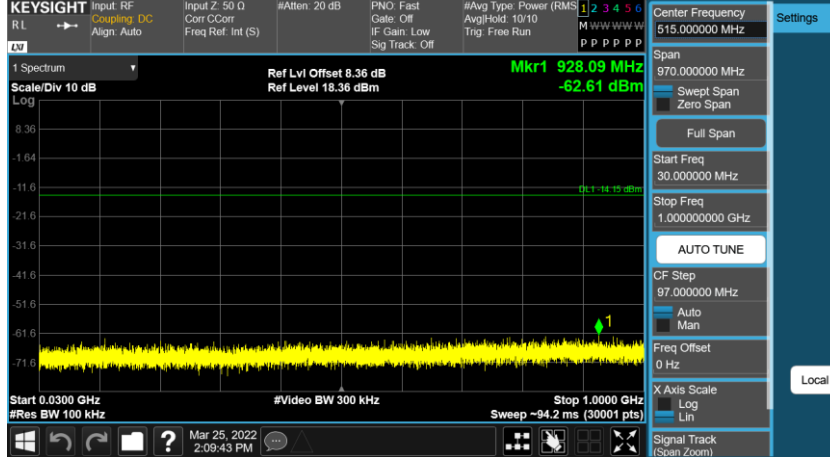
3DH5 2402 1000~26500



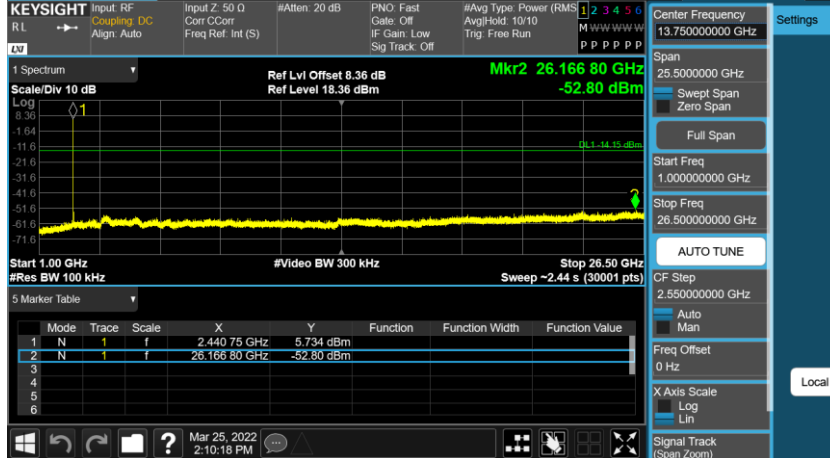
3DH5 2441 0~Reference



3DH5 2441 30~1000



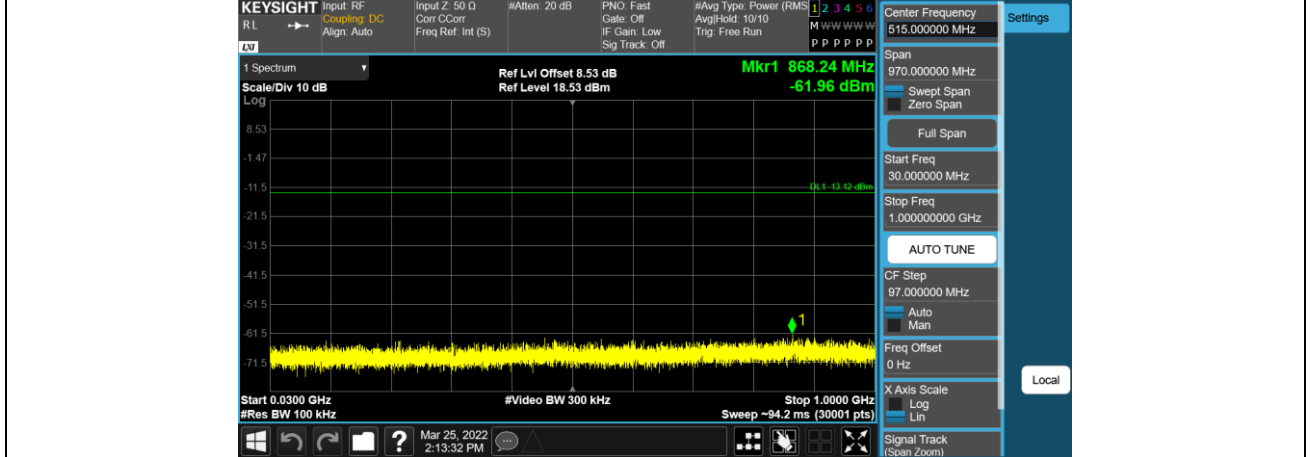
3DH5 2441 1000~26500



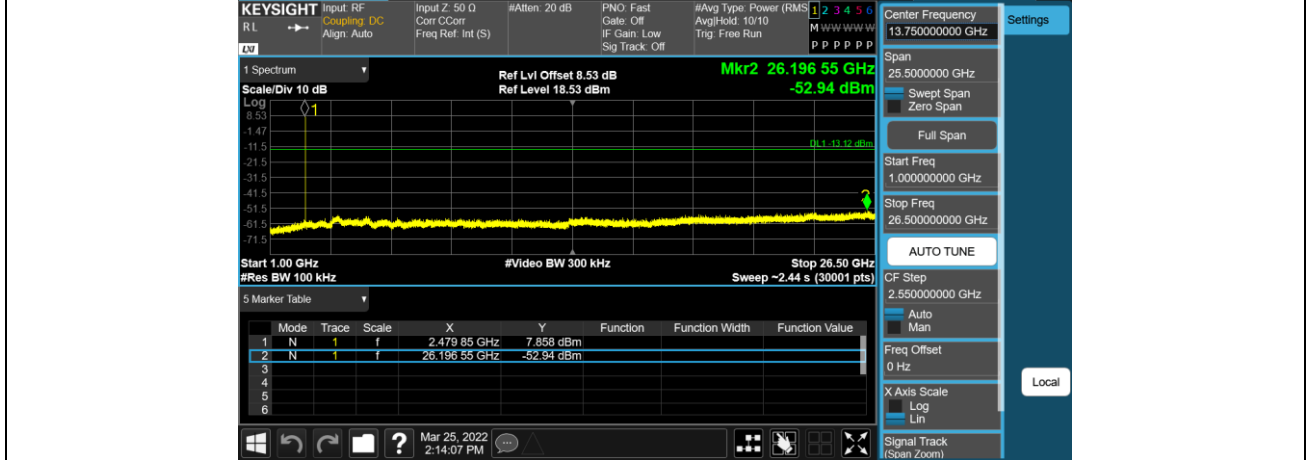
3DH5 2480 0~Reference



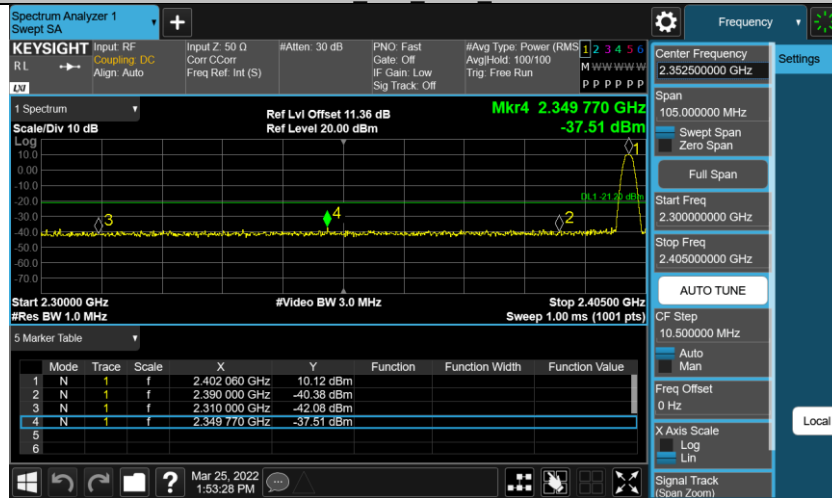
3DH5 2480 30~1000



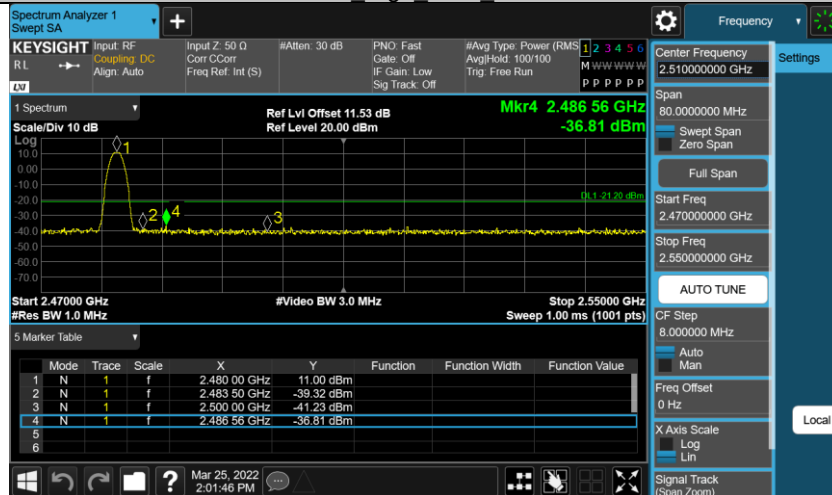
3DH5 2480 1000~26500



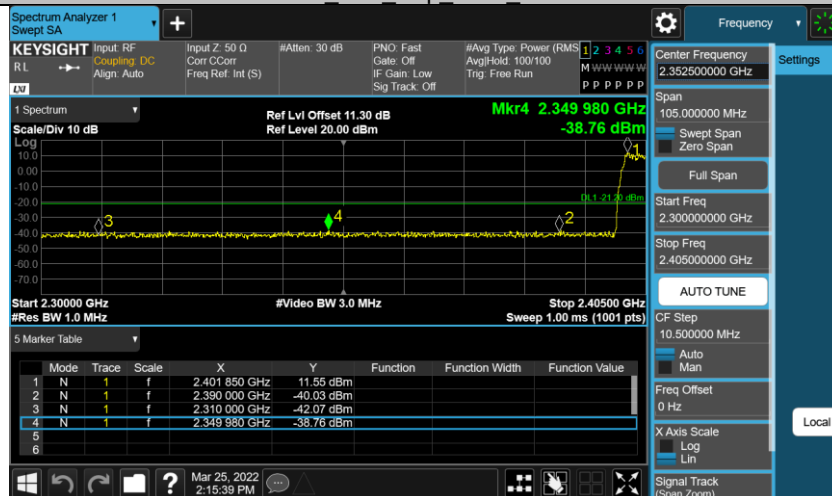
DH5 Low 2402 Peak

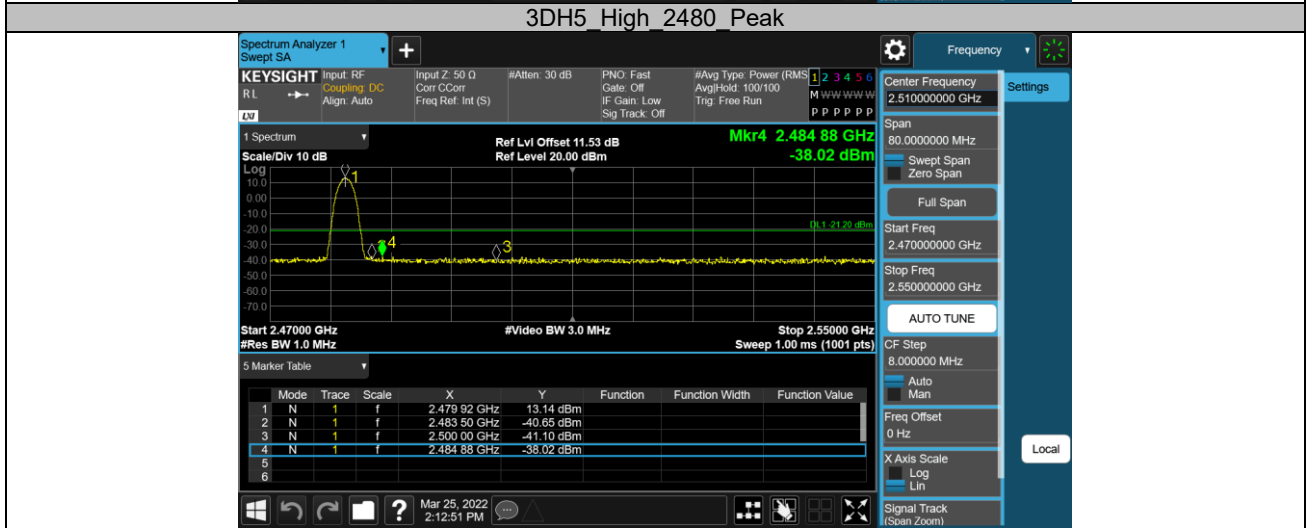
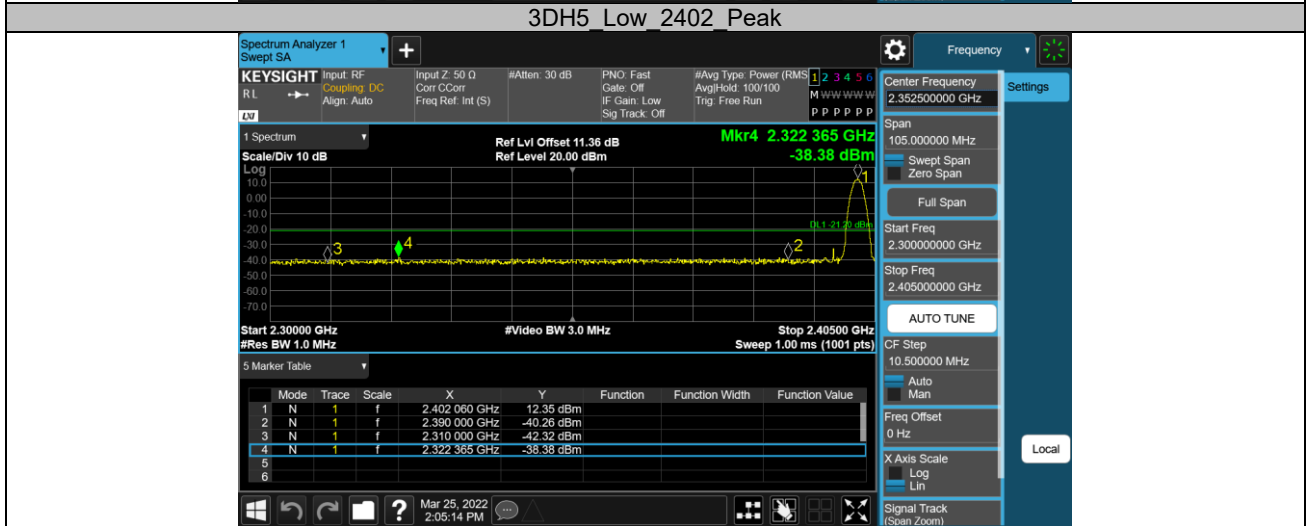
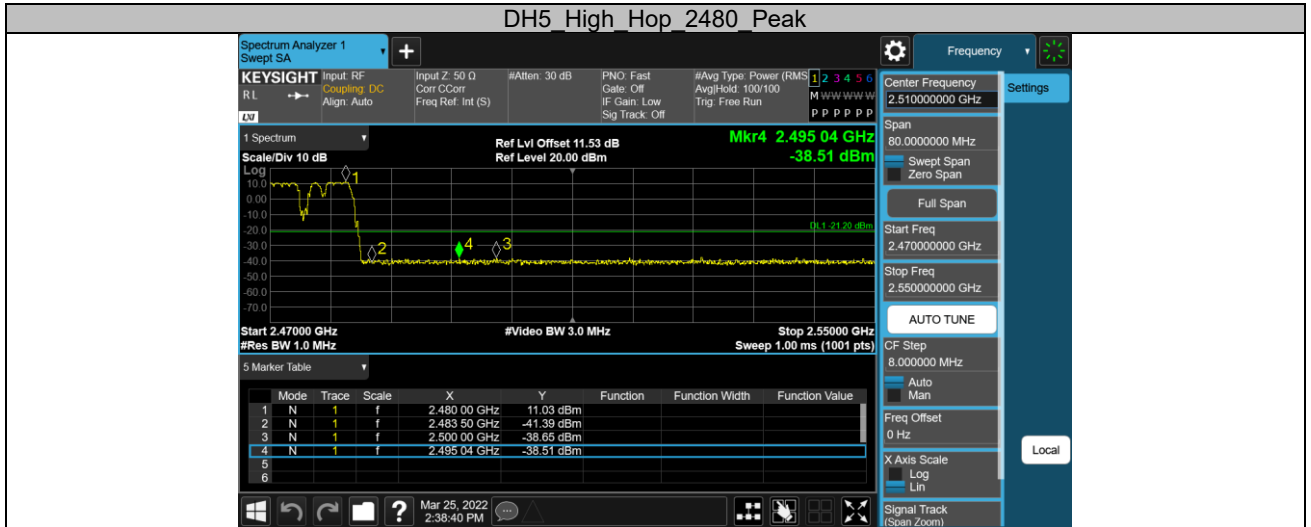


DH5 High 2480 Peak



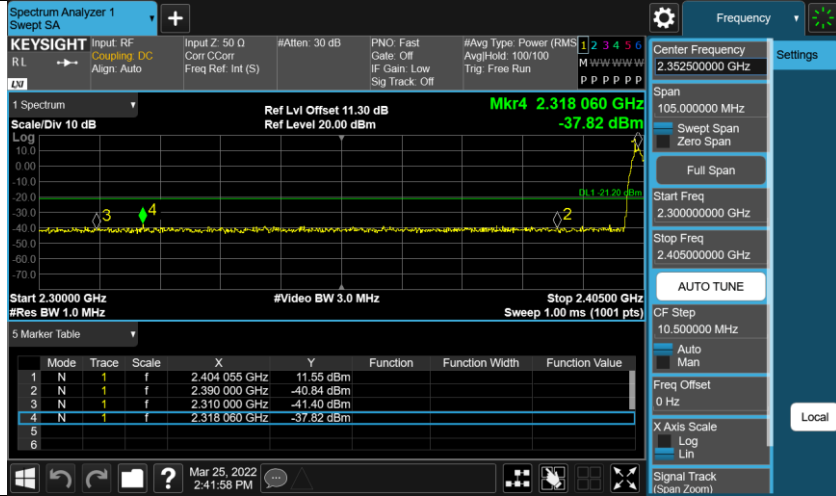
DH5 Low Hop 2402 Peak



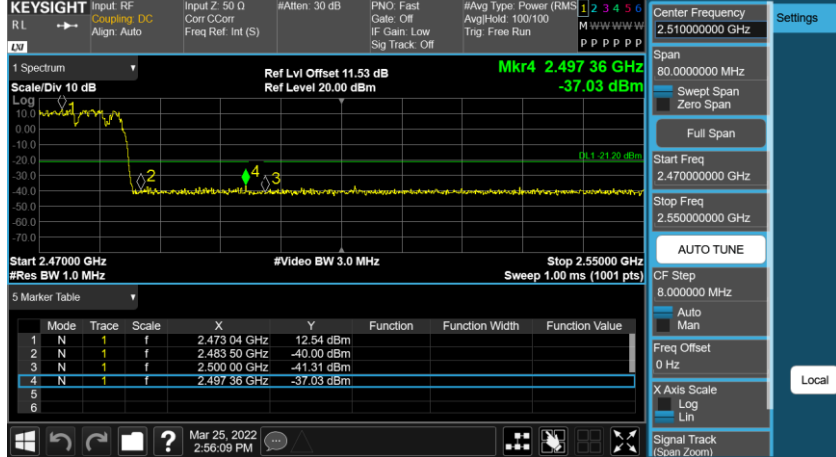




3DH5 Low Hop 2402 Peak



3DH5 High Hop 2480 Peak

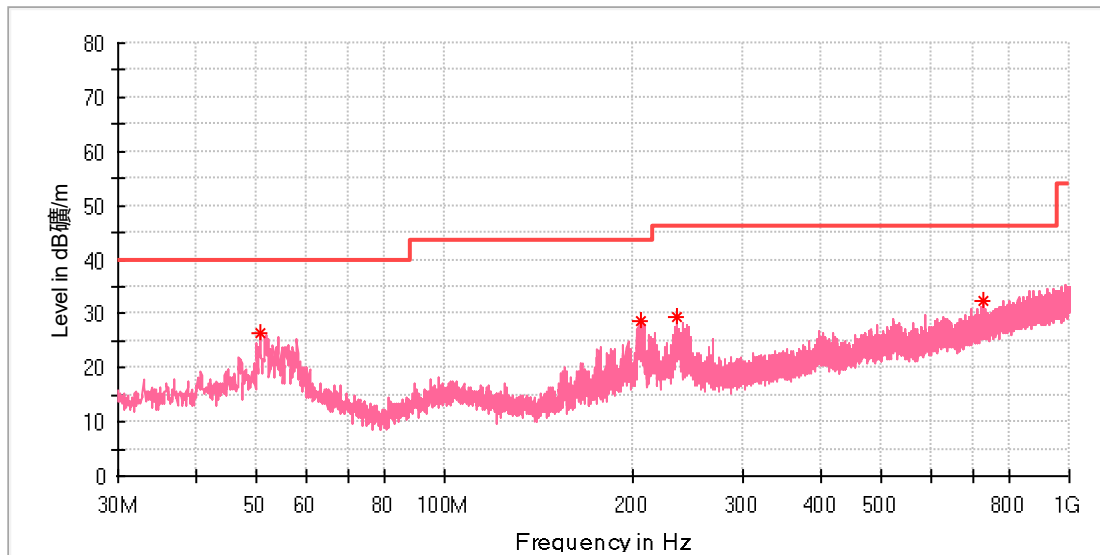






## EUT Information

EUT Name:	Wi-Fi Module
Model:	WF-M63B-UWP1
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168361390/A003220167-006
Test Voltage::	DC 5V From USB
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



## Critical\_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
50.709500	26.43	40.00	13.57	100.0	V	70.0	-18.3
206.200500	28.48	43.50	15.02	100.0	V	350.0	-18.9
235.785500	29.26	46.00	16.74	100.0	V	29.0	-17.8
728.497000	32.28	46.00	13.72	100.0	V	277.0	-7.5

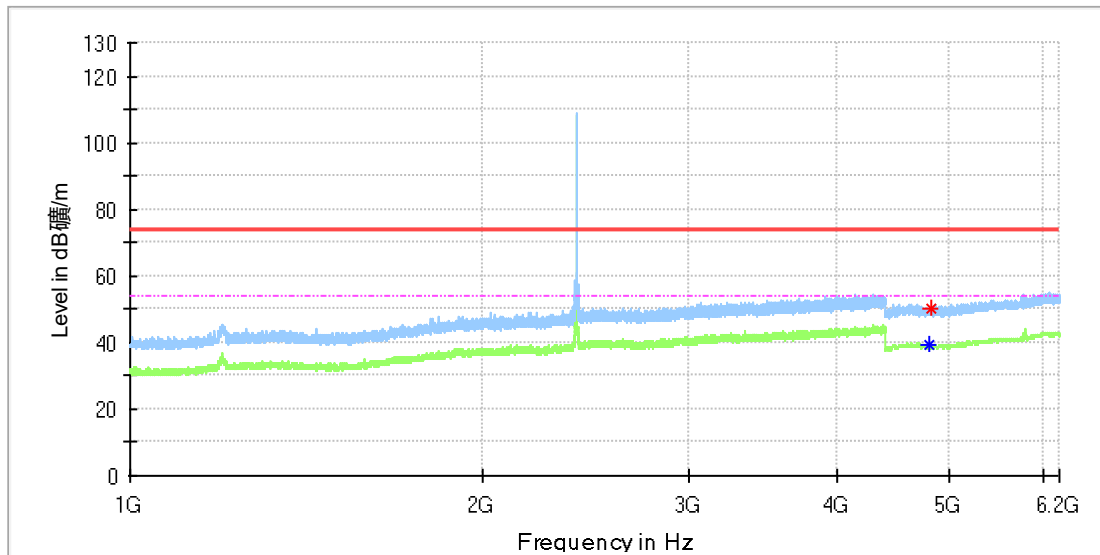
## Final\_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Above 1GHz

### EUT Information

EUT Name:	Wi-Fi Module
Model:	WF-M63B-UWP1
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168361390/A003220167-006
Test Voltage::	DC 5V From USB
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



### Critical\_Freqs

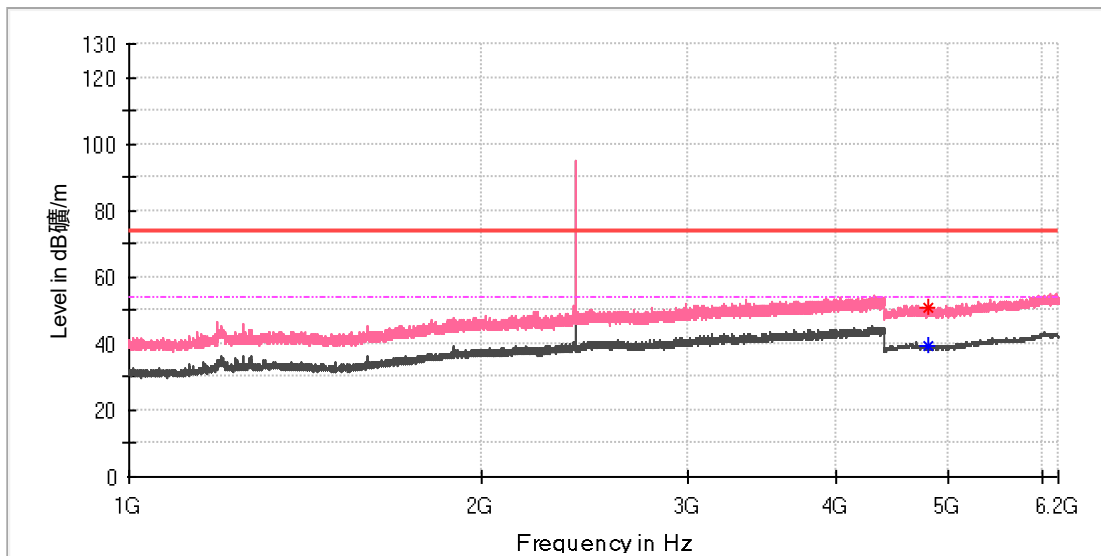
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4809.000000	---	39.51	54.00	14.49	100.0	H	56.0	11.8
4811.500000	50.35	---	74.00	23.65	100.0	H	110.0	11.8

### Final\_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

### EUT Information

EUT Name: Wi-Fi Module  
 Model: WF-M63B-UWP1  
 Test Mode: BR\_DH5\_Low channel  
 Order No/Sample No: 168361390/A003220167-006  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 23 Humi:56%  
 Test Standard: FCC 15.247  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

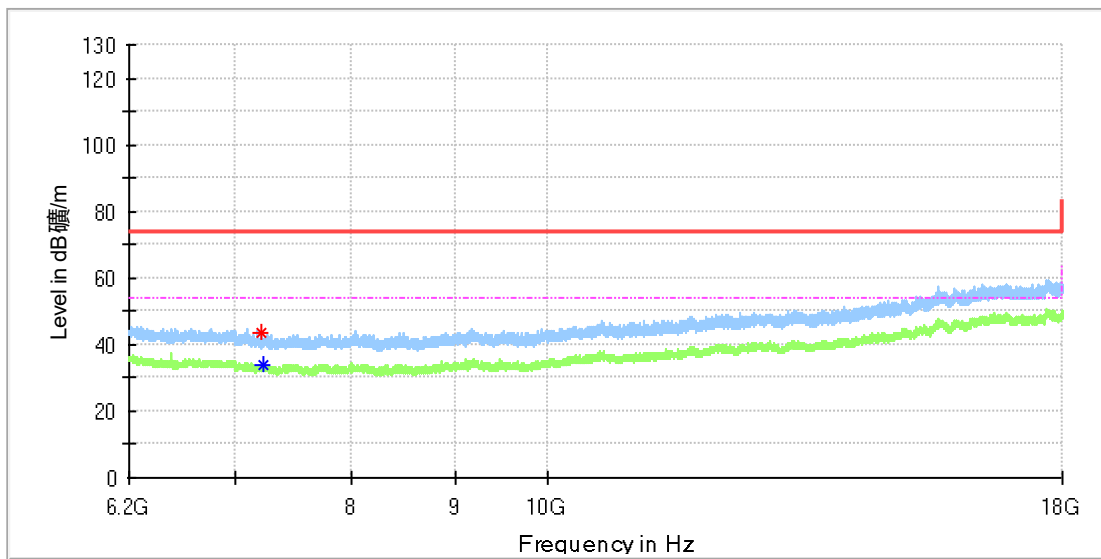
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4808.000000	50.53	---	74.00	23.47	100.0	V	1.0	11.8
4810.000000	---	39.42	54.00	14.58	100.0	V	298.0	11.8

### Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

### EUT Information

EUT Name: Wi-Fi Module  
 Model: WF-M63B-UWP1  
 Test Mode: BR\_DH5\_Low channel  
 Order No/Sample No: 168361390/A003220167-006  
 Test Voltage: DC 5V From USB  
 Remark: Temp 23 Humi:56%  
 Test Standard: FCC 15.247  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

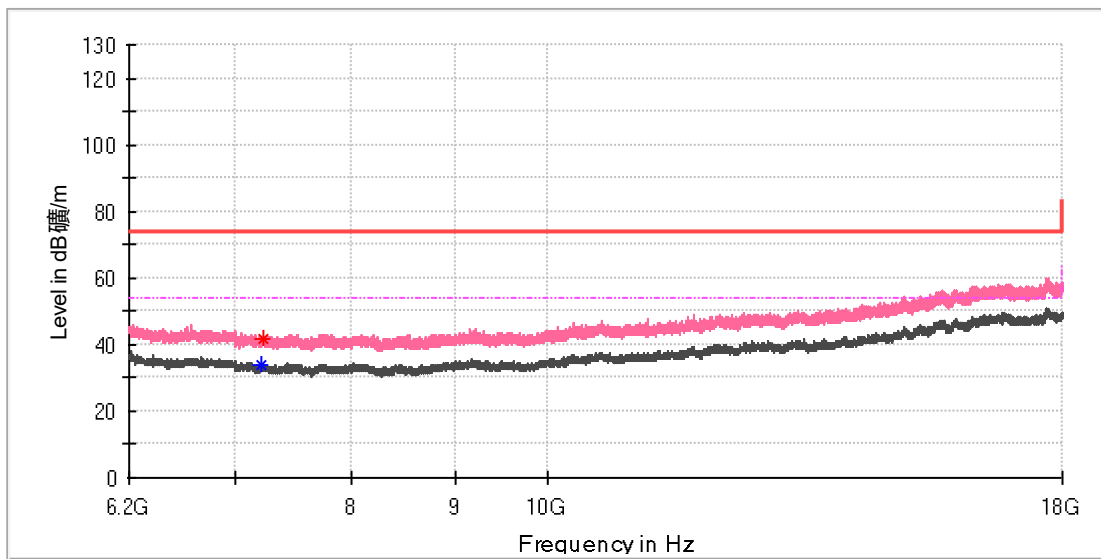
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7213.816667	43.35	---	74.00	30.65	100.0	H	30.0	8.7
7228.566667	---	33.73	54.00	20.27	100.0	H	30.0	8.6

### Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

### EUT Information

EUT Name: Wi-Fi Module  
 Model: WF-M63B-UWP1  
 Test Mode: BR\_DH5\_Low channel  
 Order No/Sample No: 168361390/A003220167-006  
 Test Voltage: DC 5V From USB  
 Remark: Temp 23 Humi:56%  
 Test Standard: FCC 15.247  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

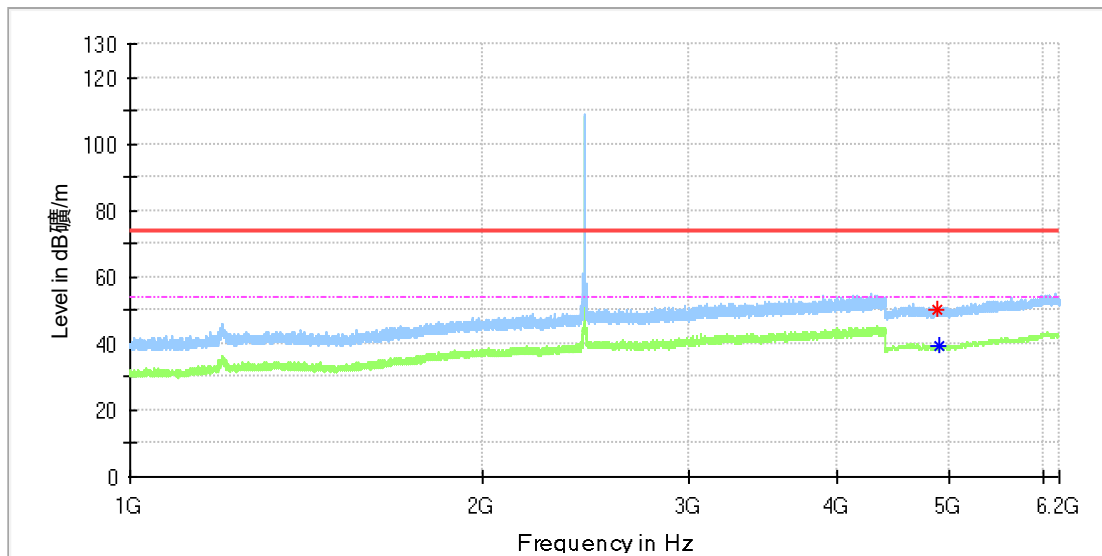
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7205.950000	---	33.98	54.00	20.02	100.0	V	0.0	8.8
7220.700000	41.87	---	74.00	32.13	100.0	V	185.0	8.7

### Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

### EUT Information

EUT Name: Wi-Fi Module  
 Model: WF-M63B-UWP1  
 Test Mode: BR\_DH5\_Mid channel  
 Order No/Sample No: 168361390/A003220167-006  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 23 Humi:56%  
 Test Standard: FCC 15.247  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical\_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4877.500000	50.17	---	74.00	23.83	100.0	H	210.0	11.8
4890.500000	---	39.12	54.00	14.88	100.0	H	203.0	11.8

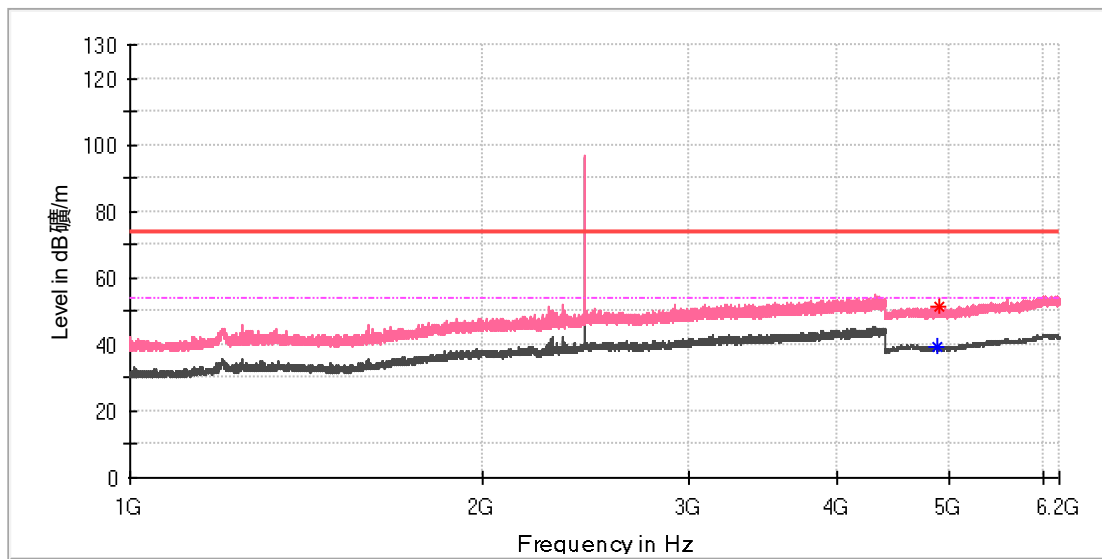
### Final\_Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---



### EUT Information

EUT Name: Wi-Fi Module  
 Model: WF-M63B-UWP1  
 Test Mode: BR\_DH5\_Mid channel  
 Order No/Sample No: 168361390/A003220167-006  
 Test Voltage: DC 5V From USB  
 Remark: Temp 23 Humi:56%  
 Test Standard: FCC 15.247  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

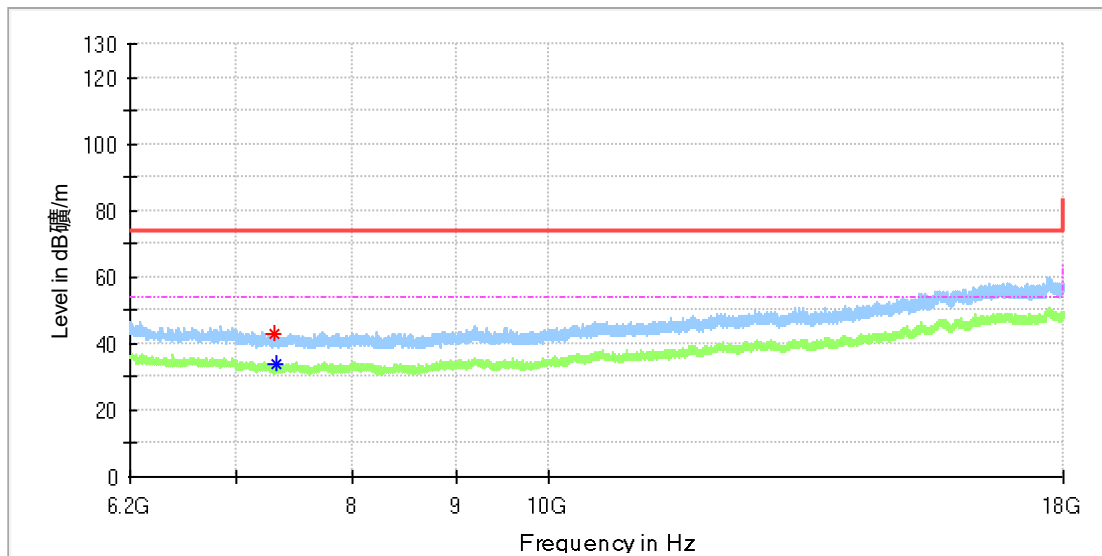
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4884.500000	---	39.01	54.00	14.99	100.0	V	101.0	11.8
4892.500000	51.30	---	74.00	22.70	100.0	V	160.0	11.8

### Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

### EUT Information

EUT Name: Wi-Fi Module  
 Model: WF-M63B-UWP1  
 Test Mode: BR\_DH5\_Mid channel  
 Order No/Sample No: 168361390/A003220167-006  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 23 Humi:56%  
 Test Standard: FCC 15.247  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

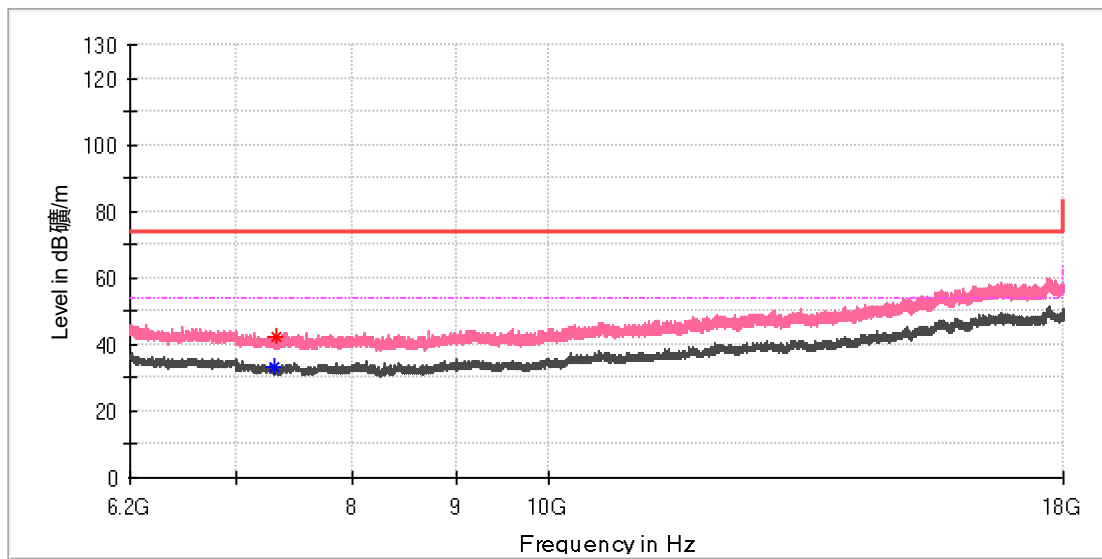
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7304.775000	42.94	---	74.00	31.06	100.0	H	190.0	8.3
7319.525000	---	33.98	54.00	20.02	100.0	H	119.0	8.2

### Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

### EUT Information

EUT Name: Wi-Fi Module  
 Model: WF-M63B-UWP1  
 Test Mode: BR\_DH5\_Mid channel  
 Order No/Sample No: 168361390/A003220167-006  
 Test Voltage: DC 5V From USB  
 Remark: Temp 23 Humi:56%  
 Test Standard: FCC 15.247  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

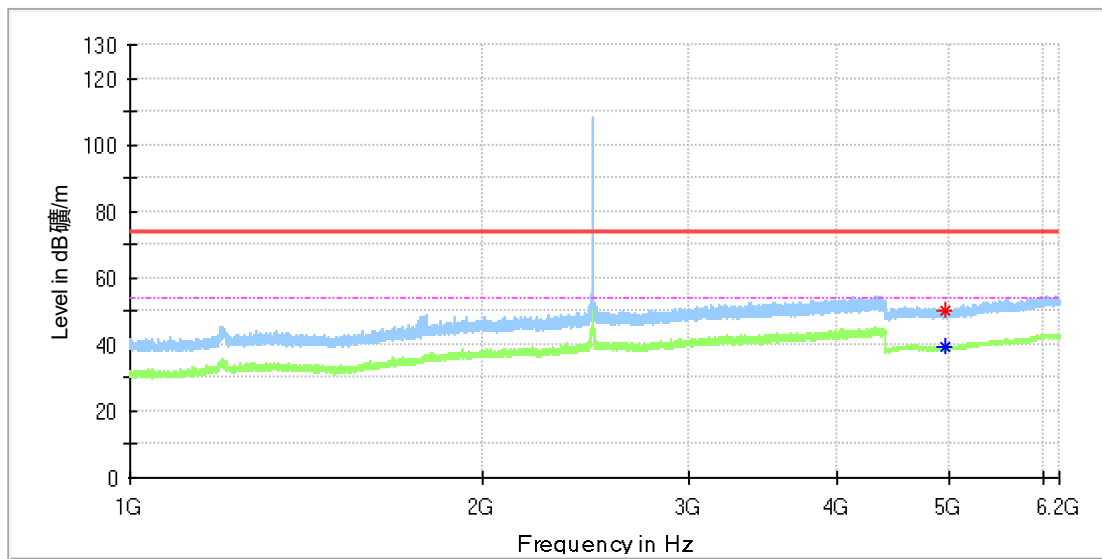
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7310.183333	---	33.31	54.00	20.69	100.0	V	246.0	8.2
7328.866667	42.56	---	74.00	31.44	100.0	V	147.0	8.1

### Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

### EUT Information

EUT Name: Wi-Fi Module  
 Model: WF-M63B-UWP1  
 Test Mode: BR\_DH5\_High channel  
 Order No/Sample No: 168361390/A003220167-006  
 Test Voltage: DC 5V From USB  
 Remark: Temp 23 Humi:56%  
 Test Standard: FCC 15.247  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

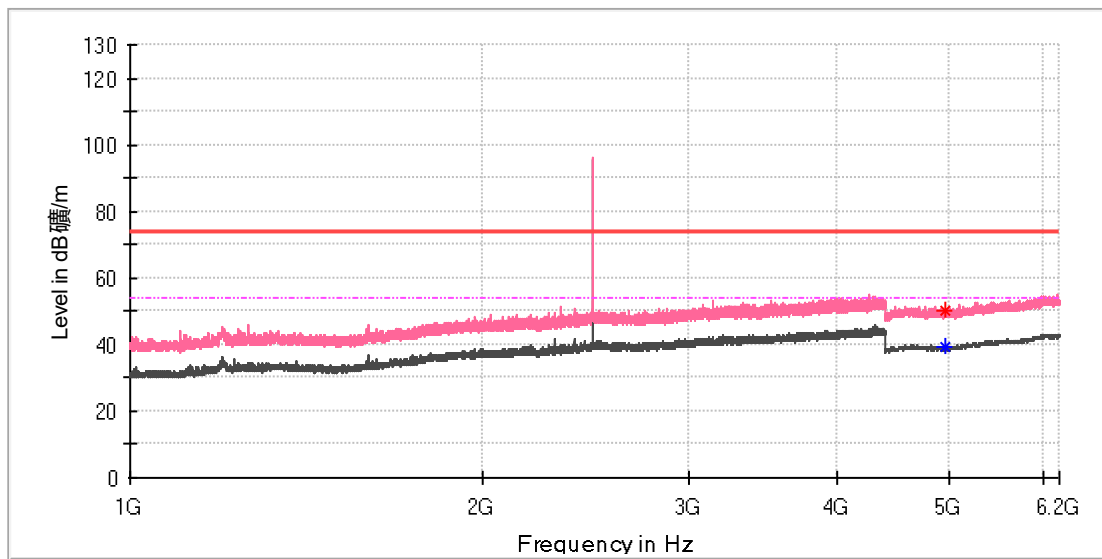
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4959.500000	---	39.37	54.00	14.63	100.0	H	5.0	11.8
4961.500000	50.48	---	74.00	23.52	100.0	H	49.0	11.8

### Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

### EUT Information

EUT Name: Wi-Fi Module  
 Model: WF-M63B-UWP1  
 Test Mode: BR\_DH5\_High channel  
 Order No/Sample No: 168361390/A003220167-006  
 Test Voltage: DC 5V From USB  
 Remark: Temp 23 Humi:56%  
 Test Standard: FCC 15.247  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

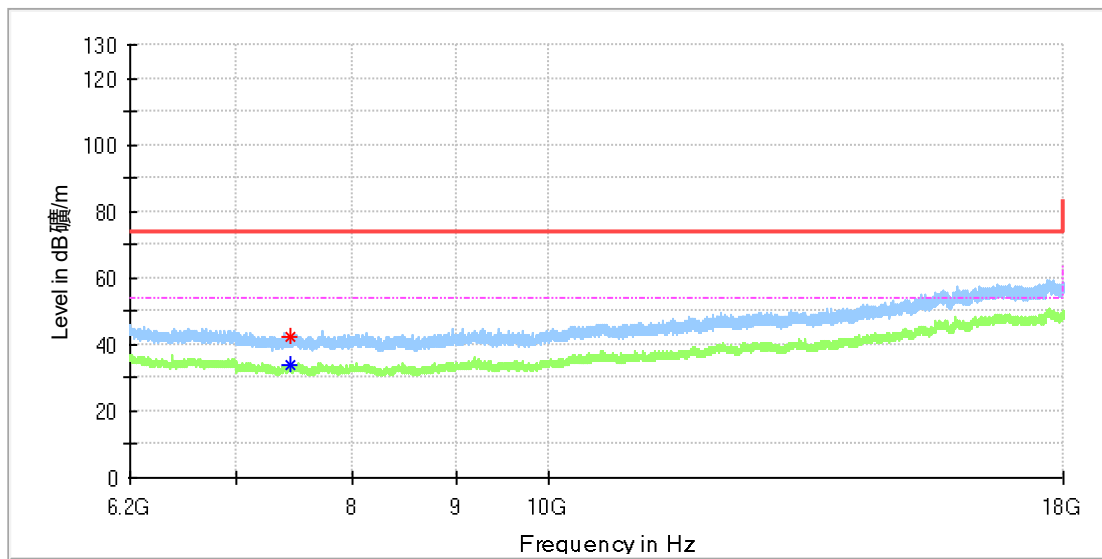
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4952.500000	---	39.59	54.00	14.41	100.0	V	22.0	11.8
4958.000000	50.30	---	74.00	23.70	100.0	V	161.0	11.8

### Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

### EUT Information

EUT Name: Wi-Fi Module  
 Model: WF-M63B-UWP1  
 Test Mode: BR\_DH5\_High channel  
 Order No/Sample No: 168361390/A003220167-006  
 Test Voltage: DC 5V From USB  
 Remark: Temp 23 Humi:56%  
 Test Standard: FCC 15.247  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

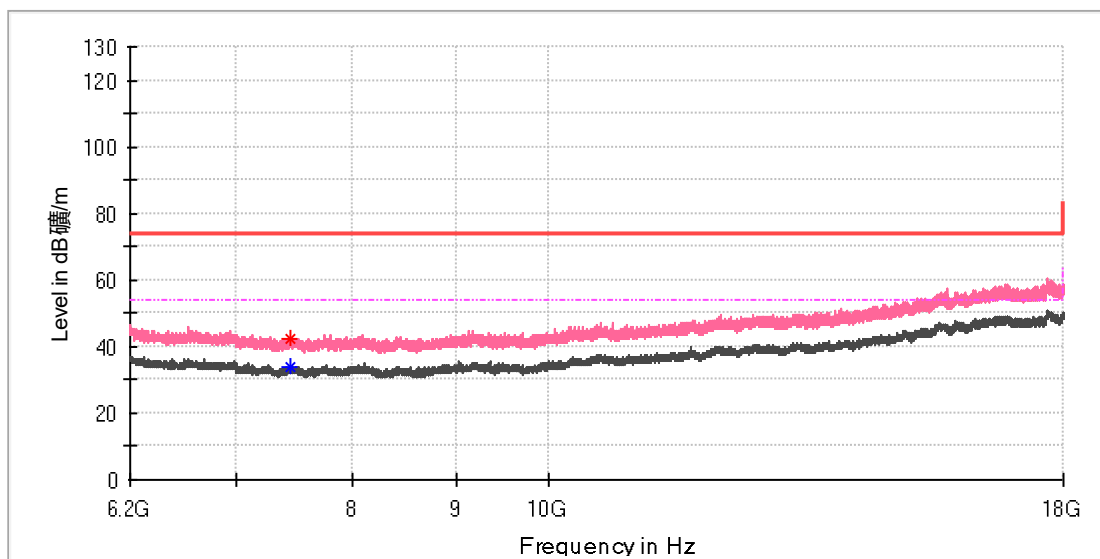
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7441.950000	---	33.86	54.00	20.14	100.0	H	168.0	8.4
7443.425000	42.32	---	74.00	31.68	100.0	H	0.0	8.5

### Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

## EUT Information

EUT Name:	Wi-Fi Module
Model:	WF-M63B-UWP1
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168361390/A003220167-006
Test Voltage::	DC 5V From USB
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



## Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7440.966667	---	33.80	54.00	20.20	100.0	V	0.0	8.4
7449.325000	42.36	---	74.00	31.64	100.0	V	31.0	8.5

## Final Result

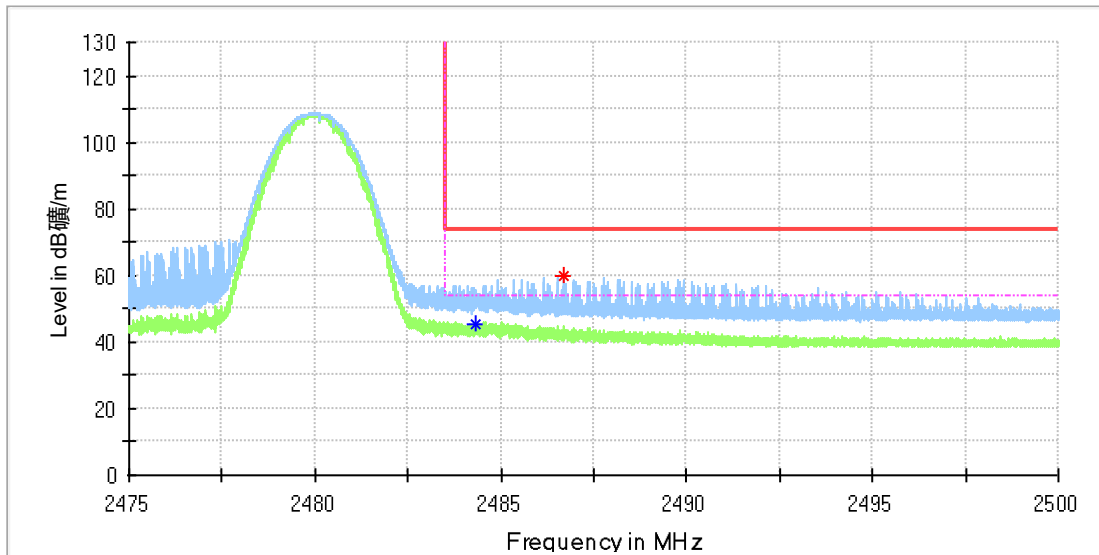
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---



## Appendix B.8: Test Results of Radiated Emissions in Restricted Bands

### EUT Information

EUT Name:	Wi-Fi Module
Model:	WF-M63B-UWP1
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168361390/A003220167-006
Test Voltage::	DC 5V From USB
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



### Critical\_Freqs

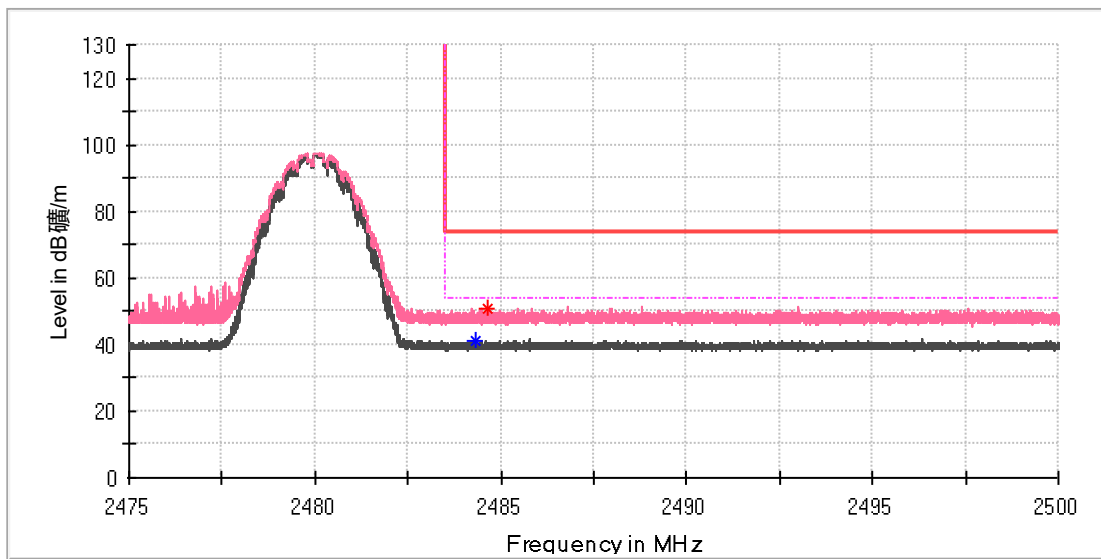
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.345000	---	45.47	54.00	8.53	100.0	H	95.0	7.4
2486.680000	59.62	---	74.00	14.38	100.0	H	128.0	7.4

### Final\_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

### EUT Information

EUT Name:	Wi-Fi Module
Model:	WF-M63B-UWP1
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168361390/A003220167-006
Test Voltage:	DC 5V From USB
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



### Critical Freqs

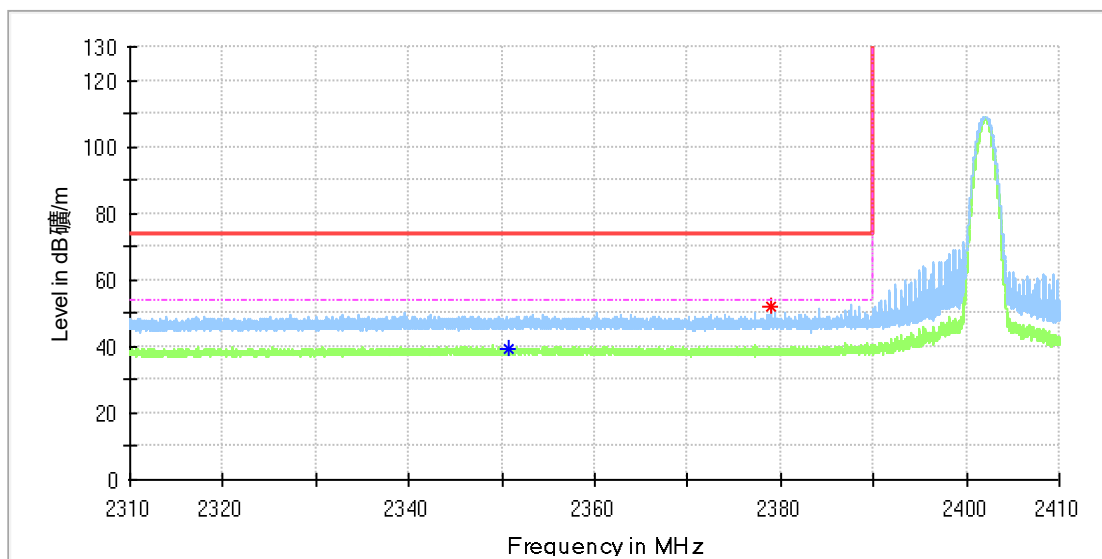
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.330000	---	41.32	54.00	12.68	100.0	V	52.0	7.4
2484.623750	50.64	---	74.00	23.36	100.0	V	52.0	7.4

### Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

### EUT Information

EUT Name:	Wi-Fi Module
Model:	WF-M63B-UWP1
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168361390/A003220167-006
Test Voltage::	DC 5V From USB
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



### Critical Freqs

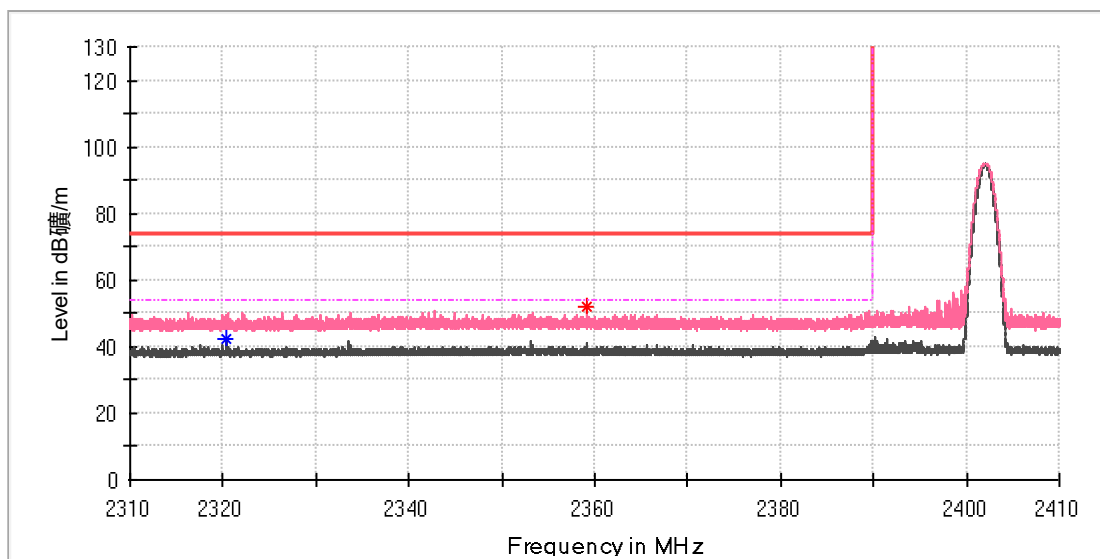
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2350.805000	---	39.42	54.00	14.58	100.0	H	219.0	6.9
2378.915000	51.99	---	74.00	22.01	100.0	H	97.0	7.0

### Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

### EUT Information

EUT Name: Wi-Fi Module  
 Model: WF-M63B-UWP1  
 Test Mode: BR\_DH5\_Low channel  
 Order No/Sample No: 168361390/A003220167-006  
 Test Voltage:: DC 5V From USB  
 Remark: Temp 23 Humi:56%  
 Test Standard: FCC 15.247  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical\_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2320.310000	---	42.06	54.00	11.94	100.0	V	303.0	6.6
2359.155000	51.78	---	74.00	22.22	100.0	V	160.0	6.9

### Final\_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---





## Appendix C: Test Results of Bluetooth LE

APPENDIX C: TEST RESULTS OF BLUETOOTH LE .....	1
APPENDIX C.1: TEST RESULTS OF CONDUCTED POWER SPECTRAL DENSITY .....	2
<i>GFSK(BLE) Mode, 1Mbps</i> .....	2
<i>GFSK(BLE) Mode, 2Mbps</i> .....	4
APPENDIX C.2: TEST RESULTS OF 6DB BANDWIDTH.....	5
<i>GFSK(BLE) Mode, 1Mbps</i> .....	5
<i>GFSK(BLE) Mode, 2Mbps</i> .....	7
APPENDIX C.3: TEST RESULTS OF 99% BANDWIDTH.....	8
<i>GFSK(BLE) Mode, 1Mbps</i> .....	8
<i>GFSK(BLE) Mode, 2Mbps</i> .....	10
APPENDIX C.4: TEST RESULTS OF CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHz BANDWIDTH.....	11
<i>GFSK(BLE) Mode, 1Mbps</i> .....	11
<i>GFSK(BLE) Mode, 2Mbps</i> .....	15
APPENDIX C.5: TEST RESULTS OF RADIATED SPURIOUS EMISSIONS.....	19
30 MHz to 1GHz.....	19
Above 1GHz.....	21
APPENDIX C.6: TEST RESULTS OF RADIATED EMISSIONS IN RESTRICTED BANDS .....	33
APPENDIX C.7: CONDUCTED EMISSIONS FOR AC MAINS .....	37



### Appendix C.1: Test Results of Conducted Power Spectral Density

#### GFSK(BLE) Mode, 1Mbps

TestMode	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	2402	-9.94	≤8.00	PASS
	2440	-9.74	≤8.00	PASS
	2480	-8.97	≤8.00	PASS
BLE_2M	2402	-7.71	≤8.00	PASS
	2440	-7.48	≤8.00	PASS
	2480	-6.90	≤8.00	PASS

